



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202 - 2733

November 16, 2018

Ms. Denise Sloan
Policy Analysis Branch
Regulatory Division, CESWG-RDP
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229

Dear Ms. Sloan:

The U.S. Environmental Protection Agency (EPA) Region 6 has reviewed Public Notice (PN) SWG-2015-00114, dated October 18, 2018. The applicant, Rio Grande LNG, LLC, and Rio Bravo Pipeline, LLC (collectively Rio Grande LNG), proposes to construct liquified natural gas (LNG) export facilities and associated pipelines. As proposed, the project would impact approximately 334.7 acres of wetlands and mudflats. The proposed project pipelines originate in Kleberg County and Jim Wells County and extend south through Willacy County to the proposed LNG terminal located north of the Brownsville Ship Channel (BSC) in Cameron County, TX.

The following comments are being provided for use in reaching a decision relative to compliance with the EPA's 404(b)(1) *Guidelines for the Specification of Disposal Sites for Dredged or Fill Material* (Guidelines) (40 CFR Part 230):

Upon review of the current proposal, the EPA has concerns whether the information provided by the applicant on the proposed project will sufficiently enable the U.S. Corps of Engineers Galveston District (Corps) to make a legally defensible permit decision in regard to compliance with the Guidelines. Under the Guidelines, no discharge of dredged or fill material may be permitted by the Corps if: (1) a practicable alternative exists that is less damaging to the aquatic environment so long as that alternative does not have other significant adverse environmental consequences, or (2) the nation's waters would be significantly degraded. Under the Guidelines, a project must incorporate all appropriate and practicable measures to first avoid impacts to wetlands, streams, and other aquatic resources and then minimize unavoidable impacts. After avoidance and minimization measures have been applied, the project must include appropriate and practicable compensatory mitigation for the remaining unavoidable impacts. The Guidelines also require evaluation of all direct, secondary and cumulative impacts reasonably associated with the proposed discharge including effects on wildlife habitat, aquatic ecosystem diversity, stability and productivity, recreation, aesthetics, and economic values.

As provided in the PN, information regarding alternatives analysis and avoidance and minimization measures is limited. The PN notes the applicant has stated that they have avoided and minimized environmental impacts considering both onsite and offsite alternatives for the proposed project, in addition to alternative facility configurations and systems alternatives. For the gas supply pipeline, the overall length of the pipeline was reduced, the construction right-of-way width was reduced by utilizing

the same construction footprint for both of the parallel pipelines, using directional drilling beneath mangrove estuarine shrub-shrub wetlands, reducing the number of temporary and permanent access roads, and increasing adjacency to existing infrastructure. Regarding compensatory mitigation, the PN notes the applicant proposed to mitigate for the proposed impacts to waters of the U.S. by preserving wetlands at the Loma Ecological Preserve. Other than the statements included above, the PN provides no additional documentation on how the project will comply with the Guidelines. No detailed information has been provided regarding alternatives considered, avoidance and minimization of impacts to aquatic habitats, or compensatory mitigation. In addition to specific alternatives evaluated, the applicant should additionally consider combinations of alternatives that may be available. If it has not yet done so, we recommend that the applicant provide information to assist the Corps in making its factual determinations and to help ensure the spirit of the Guidelines are met.

The 2008 Final Mitigation Rule states in Section 230.93(c)(1)(i) that for individual permits, the permittee must prepare a draft mitigation plan and submit it to the district engineer for review. The final mitigation plan must include the items describe in paragraphs (c)(2) through (c)(14) of the same section, *at a level of detail commensurate with the scale and scope of the impacts* [emphasis added]. At the district engineer's discretion, some of the elements may be addressed as special conditions to the permit. These required elements include: objectives, site selection, site protection, baseline information, determination of credits, mitigation workplan, maintenance plan, performance standards, monitoring requirements, long-term management plan, adaptive management plan, financial assurances and other information as required by the district engineer. While it is not required to submit this complete plan at the time of the PN, providing additional details at the earliest stage possible allows the public and commenting agencies to have a more complete understanding of the net impacts of the proposal, taking into account mitigation. The EPA strongly recommends the development of a final mitigation plan that contains more detailed information about the proposed mitigation work and requests the Corps provide the public and commenting agencies an opportunity to review.

As previously stated, the PN notes the applicant proposed to mitigate for the projected impacts to waters of the U.S. by preserving wetlands at the Loma Ecological Preserve. The EPA is concerned that Rio Grande LNG is proposing to meet its compensatory mitigation requirements for unavoidable impacts to aquatic habitats through preservation. The 2008 Final Mitigation Rule assigns a low priority to compensatory mitigation for impacts using preservation and includes a number of criteria, that must all be met, for proposals that use preservation to meet compensatory mitigation requirements. Per 40 CFR 230.93(h), preservation may be used to provide compensatory mitigation when all the following criteria are met: (i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed; (ii) The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available; (iii) Preservation is determined by the district engineer to be appropriate and practicable; (iv) The resources are under threat of destruction or adverse modifications; and (v) The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust). Also, where preservation is used to provide compensatory mitigation, to the extent appropriate and practicable the preservation shall be done in conjunction with aquatic resource restoration, establishment, and/or enhancement activities. This requirement may be waived by the district engineer where preservation has been identified as a high priority using a watershed approach, but compensation ratios shall be higher.

The EPA recommends that Rio Grande LNG undertake an exhaustive evaluation of potential mitigation opportunities based on restoration or enhancement prior to limiting mitigation to preservation as the methodology of choice. This evaluation may be a combination of approaches and may consider including out-of-kind or out-of-watershed projects that may be more ecologically desirable than preservation only. If Rio Grande LNG continues to pursue preservation to meet its compensatory mitigation requirements, the EPA recommends the applicant provide robust support for the proposed preservation approach focusing on the requirements of the 2008 Mitigation Rule. Specifically, the applicant would need to satisfy the threat of destruction or adverse modification criteria and address appropriate higher compensation ratios.

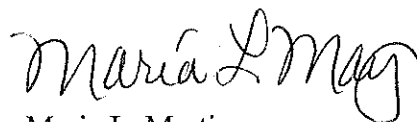
Furthermore, the EPA recommends that any proposed mitigation plan needs to ensure appropriate site protection, baseline information, maintenance plan, performance standards, monitoring requirements, long-term management plan, adaptive management plan, and financial assurances are included. The EPA recommends that a third-party conservation easement holder, such as an accredited non-profit conservation easement organization, be utilized and recommends the conservation easement holder be identified prior to approval of the mitigation plan and permit issuance. Wetland impacts and details to support functional quality of the wetlands at the impact site and the proposed mitigation site should be verified by the Corps. Mitigation plan success criteria and monitoring requirements should be sufficiently robust to ensure the mitigation approach effectively compensates for the significant project wetland impacts. The EPA recommends the applicant develop a specific itemized budget for the short-term financial assurances, and detailed average annualized long-term management costs and demonstrate that the amount of the proposed long-term funding endowment (not included in the provided mitigation plan) will be adequate to maintain and manage the aquatic resources on the site and defend the conservation easement in perpetuity, considering inflation and any investment fees. The applicant should demonstrate that the endowment fund's investments will yield sufficient funds to continue long-term and/or adaptive management.

Finally, the applicant should clearly identify impacts to aquatic resources by type and acreage and clarify where compensatory mitigation is being performed for permanent, temporal or conversion losses. The PN states the construction and maintenance of the gas supply pipeline would result in no permanent loss of waters of the U.S., however, it is unclear how these temporary impacts are anticipated to be restored to pre-construction conditions. The EPA recommends the applicant identify the duration and activities planned to restore to pre-project functions after the project has been completed. Typically, the threshold for activities to be considered temporary is less than 12 months or a single growing season.

In summary, the EPA recommends the Corps work with the applicant to enhance the information provided to assist the Corps in determining compliance with the Guidelines. Additionally, the EPA recommends the Corps work with the applicant to develop a revised comprehensive compensatory mitigation plan at a level of detail commensurate with the scale and scope of the impacts for all unavoidable impacts.

Thank you for the opportunity to review and comment on this PN, and if you have any questions on these comments, please contact Paul Kaspar of my staff, at kaspar.paul@epa.gov or 214-665-7459.

Sincerely,

A handwritten signature in cursive script, reading "Maria L. Martinez".

Maria L. Martinez
Wetlands Section Chief

cc: U.S. Fish and Wildlife Service, Corpus Christi, TX
National Marine Fisheries Service, Galveston, TX
Texas Commission on Environmental Quality, Austin, TX
Texas Parks and Wildlife Department, Corpus Christi, TX